

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re Application of |) | |
| Endler, et al. |) | |
| |) | |
| Serial No.: 10/821,142 |) | |
| |) | Examiner: James M. Hannett |
| Filed: April 7, 2004 |) | |
| |) | Art Unit: 2622 |
| For: DIGITAL CAMERA WITH A |) | |
| SPHERICAL DISPLAY |) | |
| (amended title) |) | |

AMENDED APPEAL BRIEF
UNDER 37 C.F.R. § 41.37

Mail Stop: APPEAL BRIEF - PATENT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Appellants submit this amended appeal brief under 37 C.F.R. § 41.37 appealing the final rejection of Claims 1 - 18 and 24 in the final office action mailed May 7, 2007 and in response to the Notice of Non-Compliant Appeal Brief mailed October 29, 2007.

(1) Real Party in Interest

The real parties in interest are Sony Corporation and Sony Electronics Inc.

(2) Related Appeals and Interferences

No related appeals or interferences are known to Appellants.

(3) Status of Claims

Claims 1 - 24 were submitted for examination in the application filed on April 7, 2004.

Claims 19 - 21 were cancelled in an amendment, filed February 8, 2007.

Claims 1 - 18 and 22 - 24 remain pending.

Claims 1 - 5, 7 - 12, 13, 15 - 18, 22, and 24 stand rejected under 35 U.S.C. § 102(c) as being anticipated by U.S. Patent No. 6,527,555 (Storm).

Claims 6 and 14 stand rejected under 35 U.S.C. § 103(a) as being obvious over Storm.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Storm in view of U.S. Patent No. 5,898,421 (Quinn).

Claims 1 - 18 and 24 are appealed.

(4) Status of Amendments

No amendments have been filed subsequent to the office action mailed May 7, 2007.

(5) Summary of Claimed Subject Matter

The claimed subject matter generally is directed to methods, systems and apparatuses for displaying or projecting content streams. (See for example, FIGs. 7A, 7B, 9) Below is a concise explanation of at least the subject matter defined in each of independent claims 1, 12, 13, 18 and 24.

In some embodiments the methods include simultaneously displaying a first content stream and a second content stream within a spherical display. (see at least Appl'n. pg. 16, ln. 21 - pg. 17, ln. 4) Instructions are received to change a partition between a first area for displaying the first content stream and a second area for displaying the second content stream. (see at least Appl'n. pg. 17, lns. 5 - 14; FIGs. 7A, 7B) The first area and the second area are dynamically partitioned based on the instructions, wherein the first area and the second area are within the spherical display. (see at least Appl'n. pg. 17, lns. 8 - 14; pg. 18, lns. 1 - 7; FIGs. 7A, 7B)

In some embodiments a system includes (1) means for simultaneously displaying a first content stream and a second content stream within a spherical display (see at least Appl'n. pg. 9, ln. 18 - pg. 10, ln. 4; pg. 16, ln. 21 - pg. 17, ln. 4; FIGs. 3, 7A, 7b); (2) means

for receiving instructions to change a partition between a first area for displaying the first content stream and a second area for displaying the second content stream (see at least Appl'n. pg. 9, lns. 11 - 17; pg. 17, lns. 5 - 14; FIGs. 3, 7A, 7B); and (3) means for dynamically partitioning the first area and the second area based on the instructions, wherein the first area and the second area are within the spherical display. (see at least Appl'n. pg. 9, ln. 18 - pg. 10, ln. 4; pg. 17, lns. 8 - 14; FIGs. 3, 7A, 7B)

In alternative embodiments, the methods comprise receiving a first content stream and a second content stream. (see at least Appl'n. pg. 9, ln. 21 - pg. 10, ln. 4; FIG. 3) The first content stream is projected onto a first area, and the second content stream is projected onto a second area. (see at least Appl'n. pg. 10, lns. 17 - 20; pg. 21, ln. 14 - pg. 22, ln. 3; FIG. 9) The first content stream is dynamically intersected onto the second content stream, wherein a portion of the first area and the second area are shared. (see at least Appl'n. pg. 9, ln. 3 - pg. 10, ln. 20; pg. 21, ln. 6 - pg. 22, ln. 3; FIGs. 3, 9)

In alternative embodiments, the methods comprise simultaneously capturing a first content stream and a second content stream. (see at least Appl'n. pg. 9, ln. 21 - pg. 10, ln. 4; pg. 13, ln. 10 - pg. 14, ln. 8; FIGs. 3, 5) The first content stream and the second content stream are simultaneously displayed within a spherical display. (see at least Appl'n. pg. 16, ln. 21 - pg. 17, ln. 4) A first area for displaying the first content stream and a second area for displaying the second content stream are dynamically partitioned, wherein the first area and the second area are within the spherical display. (see at least Appl'n. pg. 17, lns. 8 - 14; FIGs. 7A, 7B)

In alternative embodiments, a computer-readable medium has computer executable instructions for performing a method that comprises receiving a first content stream and a second content stream. (see at least Appl'n. pg. 7, ln. 7 - pg. 9, ln. 2; pg. 9, ln. 21 - pg. 10, ln. 4; FIGs. 1, 2, 3) The first content stream is projected onto a first area, and the second content stream is projected onto a second area. (see at least Appl'n. pg. 10, lns. 17 - 20; pg. 21, ln. 14 - pg. 22, ln. 3; FIG. 9) The first content stream is dynamically intersected onto the second content stream, wherein a portion of the first area and the second area are shared. (see at least Appl'n. pg. 9, ln. 3 - pg. 10, ln. 20; pg. 21, ln. 6 - pg. 22, ln. 3; FIGs. 3, 9)

(6) Grounds of Rejection to be Reviewed on Appeal

Issue 1: Whether claims 1 - 5, 7 - 12, 13, 15 - 18, and 24 are unpatentable under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,527,555 (Storm).

Issue 2: Whether claims 6 and 14 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Storm.

(7) Arguments

Issue 1: claims 1 - 5, 7 - 12, 13, 15 - 18, and 24 are patentable under 35 U.S.C. §102 over Storm.

The Examiner rejected claims 1 - 5, 7 - 12, 13, 15 - 18, and 24 under 35 U.S.C. § 102 as being anticipated by Storm. Additionally, the Examiner rejected the remaining pending claims, claims 6 and 14 under 35 U.S.C. § 103(a) over Storm. However both of these remaining claims are dependent from those claims rejected under 35 U.S.C. § 102. Therefore all pending claims are discussed under this “issue 1,” since Appellants’ arguments here, if accepted, should have the effect of reversing the rejections of all pending claims.

Independent Claims 1, 12 and 18

Independent claims 1, 12 and 18 were rejected by the Examiner who relied on the same reasons for all of them. Claim 1 includes the limitation: “dynamically partitioning the first area and the second area based on the instructions.” Claim 12 includes the limitation: “means for dynamically partitioning the first area and the second area based on the instructions.” Claim 18 includes the limitation: “dynamically partitioning a first area for displaying the first content stream and a second area for displaying the second content stream.”

In the final rejection, the Examiner asserts at page 3 that Storm discloses these limitations, citing col. 1, lines 59 - 67. Appellants submit that this cited portion of Storm does not disclose these limitations. Rather, this describes a display of sequences of images, and the response to user inputs, “such as the user interactively modifying the rate of display of a sequence being displayed, or multiple images or combination of images can be created

and displayed, such as weather data being combined with a political map or soils being correlated with animal or plant distributions.” (Storm, col. 1, lns. 63 - 67)

The above-referenced claim limitations, on the other hand, require a *dynamic partitioning* of first and second areas for displaying first and second content streams. Support for these limitations can be found in the specification, such as for example, at least with reference to FIGs. 7A and 7B. In referring to these figures, the specification states:

“[A] dividing demarcation 750 is shown dividing the content 01, 02, and 03. In one embodiment, the playback ring 530 in combination with the knob 525 controls the allocation of the display area 615 between the content 01, 02, and 03. For example, by rotating the knob 525, the overall orientation of the content 01, 02, and 03 is rotated. In this example, by rotating the playback ring 530, *the amount of space allocated* for the content 01, 02, and 03 is *changed*.”

“The allocation of the display area 615 for the content 01, content 02, and content 03 are changed from the content 01, content 02, and content 03 shown in FIG. 7A. In FIG. 7B, a greater area of the display area 615 is allocated for the content 01, and content 03 compared to FIG. 7A.”
(Appl’n., pg. 17, lns. 5 - 14; pg. 18, lns. 3 - 7) (emphasis added).

Appellants contend that the cited portions of Storm simply do not disclose these claim limitations. These portions disclose interactively modifying the rate of display of a sequence, or the display of multiple images or combination of images, such as weather data being combined with a political map. However this is not a *dynamic partitioning* of first and second areas for displaying first and second content streams as required by claims 1, 12 and 18.

Thus independent claims 1, 12 and 18 are not anticipated by Storm and their rejections should be overruled.

Dependent Claims 2 - 11

Claims 2 - 11 depend directly or indirectly from independent claim 1, incorporate all of the limitations of claim 1, and include additional limitations. Thus for these reasons and for the reasons discussed above with respect to claim 1, Appellants submit that dependent claims 2 - 11 patentably distinguish over Storm.

Dependent Claim 7

There are alternative grounds for overruling the rejection to claim 7. This claim includes the limitation: “wherein the instructions are based on rotating a playback ring to adjust the partition.” In rejecting this claim, the office action states: “the Examiner views a DVD player as a playback ring (playback disk). Furthermore, the data transmitted from the DVD player determines (where and what) information will be displayed.” (Office action, pg. 4)

The Examiner’s argument and citations to Storm simply do not disclose this limitation. The “instructions” in claim 7 refer to the instructions (in independent claim 1) to change a partition and for dynamically partitioning based on the instructions. The office action has not shown how the rotating of a DVD player will provide instructions for changing the partition and for dynamically partitioning as required by claim 7. Accordingly, Storm has not been shown to anticipate claim 7.

Dependent Claim 8

There are alternative grounds for overruling the rejection to claim 8. This claim includes the limitation: “wherein the spherical display includes a flat display surface and a spherical display surface.” In rejecting this claim, the office action states: “Storm depicts in Figure 1 the spherical display (10) includes a flat display surface (16) and a spherical display surface (10). (Office Action, pg. 4)

Applicants contend, however, that the Examiner’s argument and citations to Storm do not disclose this limitation. Reference numeral 16 in Figure 1 of Storm is cited in the office action as disclosing “a flat display surface.” However reference numeral 16 does not designate anything that appears to be flat in Figure 1. Rather, this depicts a round or spherical element. In the specification, Storm designates this only as “electronic displays.” (Storm, col. 3, ln. 21)

Reference numeral 10 in Figure 1 of Storm is cited in the office action as disclosing a “spherical display surface.” However, the Examiner is not clear or sufficiently specific, since this reference numeral designates the entire device. This element is referred to in the

specification as “a spherical programmable device 10 for the display of information. . .”
(Storm, col. 3, lns. 15 - 16)

Accordingly, Storm has not been shown to anticipate claim 8.

Independent Claims 13 and 24

In rejecting independent claims 13 and 24, the Examiner cited Storm and stated that claim 13 was rejected for the same reasons as claim 1 and 6, and that claim 24 was rejected for the same reason as claim 1. (Office Action, pg. 5) Given the similarity between claims 13 and 24, it is not clear why the Examiner is including claim 6 as part of his reasons as to one of these claims, but not the other. Moreover, given the inclusion in claim 6 of limitations that are not present in claim 13, the office action is unclear as to the application to claim 13 of the reasons for the claim 6 rejection.

Claims 13 and 24 each contain the following limitation: “dynamically intersecting the first content stream onto the second content stream wherein a portion of the first area and the second area are shared.” Referring to his rejection to claim 1 (incorporated here as the basis for rejecting claims 13 and 24), the Examiner asserts at page 3 that Storm discloses these limitations, citing col. 1, lines 59 - 67. Appellants submit that this cited portion of Storm does not disclose these limitations. Rather, this describes a display of sequences of images, and the response to user inputs, “such as the user interactively modifying the rate of display of a sequence being displayed, or multiple images or combination of images can be created and displayed, such as weather data being combined with a political map or soils being correlated with animal or plant distributions.” (Storm, col. 1, lns. 63 - 67)

The above referenced claim limitations, on the other hand, require a *dynamic* intersecting of first and second content streams. Appellants contend that the cited portions of Storm simply do not disclose these claim limitations. The cited portion of Storm references interactively modifying the rate of display of a sequence, or the display of multiple images or combination of images, such as weather data being combined with a political map. However this is not a *dynamic* intersecting of first and second content streams as required by claims 13 and 24.

Thus independent claims 13 and 24 are not anticipated by Storm and their rejections should be overruled.

Dependent Claims 14 - 17

Claims 14 - 17 depend directly from independent claim 13, incorporate all of the limitations of claim 13, and include additional limitations. Thus for these reasons and for the reasons discussed above with respect to claim 13, Appellants submit that dependent claims 14 - 17 patentably distinguish over Storm.

Issue 2: Claims 6 and 14 are patentable under 35 U.S.C. § 103(a) over Storm.

Dependent Claims 6 and 14

As discussed above, claims 6 and 14 are claims that depend from claims rejected under 35 U.S.C. § 102 as anticipated by Storm. Under “Issue 1” Appellant has set forth its arguments as to why these § 102 rejections should be reversed for these parent claims. Claims 6 and 14 include at least one of the limitations discussed under issue 1 in connection with their respective parent claims and shown not to be found in the cited portions of Storm. The Examiner rejected claims 6 and 14 over Storm under 35 U.S.C. § 103(a) by citing other portions of Storm for other limitations allegedly found in these claims.

Accordingly, claims 6 and 14 are not unpatentable under 35 U.S.C. § 103(a) over Storm. It has not been shown that Storm discloses the limitations that are discussed in issue 1 above, and that at least one of which is included in these claims.

There are alternative grounds for overruling the rejections to claims 6 and 14. Each of these claims includes the limitation: “simultaneously capturing the first content stream and the second content stream.” In rejecting these claims, the Examiner cited Storm, at column 1, lines 58 - 67 and column 4, lines 11 - 16, as well as official notice. (Office Action, pg. 6) However, this citation does not disclose this limitation.

The cited portions of Storm reflect at most an invention that is merely a display device, and not a content capturing device, such as for example, a video camera. The

Examiner's argument and official notice seem to confuse the claim term "capture" with the concept of data "receipt." That is, the office action seems to confuse the "receipt" of data, such as weather data, with the simultaneous "capture" of two content streams as required by claims 6 and 14, and as is supported by the specification. Because it is the latter that is required by these claims and that has not been disclosed or suggested by the cited portions of Storm, claims 6 and 14 are not rendered obvious.

(8) Claim Appendix

Claim 1 (original) A method comprising:

simultaneously displaying a first content stream and a second content stream within a spherical display;
receiving instructions to change a partition between a first area for displaying the first content stream and a second area for displaying the second content stream;
and
dynamically partitioning the first area and the second area based on the instructions, wherein the first area and the second area are within the spherical display.

Claim 2 (original) The method according to claim 1 further comprising storing the first content stream and the second content stream in a storage device.

Claim 3 (original) The method according to claim 1 further comprising capturing the first content stream with a content capturing device.

Claim 4 (original) The method according to claim 3 wherein the content capturing device is a video camera.

Claim 5 (original) The method according to claim 3 wherein the content capturing device is a digital camera.

Claim 6 (original) The method according to claim 1 further comprising simultaneously capturing the first content stream and the second content stream.

Claim 7 (original) The method according to claim 1 wherein the instructions are based on rotating a playback ring to adjust the partition.

Claim 8 (original) The method according to claim 1 wherein the spherical display includes a flat display surface and a spherical display surface.

Claim 9 (original) The method according to claim 1 wherein the first content stream is video footage.

Claim 10 (original) The method according to claim 1 wherein the first content stream is a digital image.

Claim 11 (original) The method according to claim 1 wherein the first content stream is audio data.

Claim 12 (original) A system comprising:

- means for simultaneously displaying a first content stream and a second content stream within a spherical display;
- means for receiving instructions to change a partition between a first area for displaying the first content stream and a second area for displaying the second content stream; and
- means for dynamically partitioning the first area and the second area based on the instructions, wherein the first area and the second area are within the spherical display.

Claim 13 (original) A method comprising:

- receiving a first content stream and a second content stream;
- projecting the first content stream onto a first area;
- projecting the second content stream onto a second area; and
- dynamically intersecting the first content stream onto the second content stream wherein a portion of the first area and the second area are shared.

Claim 14 (original) The method according to claim 13 further comprising simultaneously capturing the first content stream and the second content stream.

Claim 15 (original) The method according to claim 13 further comprising transmitting the first content stream and the second content stream in real time.

Claim 16 (original) The method according to claim 13 wherein the first content stream is video footage.

Claim 17 (original) The method according to claim 13 wherein the first content stream is captured by a video camera.

Claim 18 (original) A method comprising:

- simultaneously capturing a first content stream and a second content stream;
- simultaneously displaying the first content stream and the second content stream within a spherical display; and
- dynamically partitioning a first area for displaying the first content stream and a second area for displaying the second content stream,

wherein the first area and the second area are within the spherical display.

Claims 19 - 21 (cancelled)

Claim 22 (original) The device according to claim 18 wherein the spherical display further comprises a flat display surface and a spherical display surface.

Claim 23 (original) The device according to claim 18 further comprising a sensor to detect a gravitational force.

Claim 24 (original) A computer-readable medium having computer executable instructions for performing a method comprising:

- receiving a first content stream and a second content stream;
- projecting the first content stream onto a first area;
- projecting the second content stream onto a second area; and
- dynamically intersecting the first content stream onto the second content stream wherein a portion of the first area and the second area are shared.

(9) Evidence Appendix

None.

(10) Related Proceedings Appendix

None.

CONCLUSION

Appellant submits that the rejection of the pending claims 1 - 18 and 24 is in error, and that these claims are patentable over the applied references.

Appellant requests a reversal of the final rejection.

Respectfully submitted,

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